

IN THE CLAIMS:

Please cancel claims 13-17 and enter new claims 18-22 as shown in the following complete listing:

Claims 1-17: (cancelled)

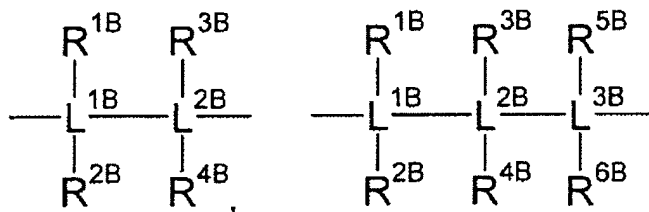
18. (new) A monocyclopentadienyl complex of the formula



where the variables have the following meanings:

Cp is a cyclopentadienyl system,

Z is a bridge between A and Cp and is selected from the group consisting of



where

$\text{L}^{1\text{B}}\text{--L}^{3\text{B}}$ are each, independently of one another, carbon or silicon,

$\text{R}^{1\text{B}}\text{--R}^{6\text{B}}$ are each, independently of one another, hydrogen, $\text{C}_1\text{--C}_{20}$ -alkyl, $\text{C}_2\text{--C}_{20}$ -alkenyl, $\text{C}_6\text{--C}_{20}$ -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or $\text{SiR}^{7\text{B}}_3$, where the organic radicals $\text{R}^{1\text{B}}\text{--R}^{6\text{B}}$ may also be substituted by halogens and two geminal or vicinal radicals $\text{R}^{1\text{B}}\text{--R}^{6\text{B}}$ may also be joined to form a five- or six-membered ring and

$\text{R}^{7\text{B}}$ are each, independently of one another, hydrogen, $\text{C}_1\text{--C}_{20}$ -alkyl, $\text{C}_2\text{--C}_{20}$ -alkenyl, $\text{C}_6\text{--C}_{20}$ -aryl or alkylaryl having from 1 to 10 carbon

atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{7B} may also be joined to form a five- or six-membered ring,

A is an unsubstituted, substituted or fused, heteroaromatic ring system,

M is a metal selected from the group consisting of chromium, molybdenum and tungsten,

m is 1, 2 or 3,

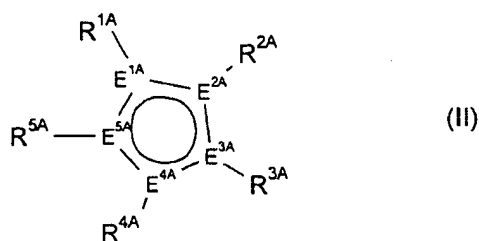
X are each, independently of one another, fluorine, chlorine, bromine, iodine, hydrogen, C_1 - C_{10} -alkyl, C_2 - C_{10} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^1R^2 , OR^1 , SR^1 , SO_3R^1 , $OC(O)R^1$, CN, SCN, β -diketonate, CO, BF_4^- , PF_6^- or a bulky noncoordinating anion,

R^1 - R^2 are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, SiR^3_3 , where the organic radicals R^1 - R^2 may also be substituted by halogens and two radicals R^1 - R^2 may also be joined to form a five- or six-membered ring,

R^3 are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^3 may also be joined to form a five- or six-membered ring and

k is 1, 2 or 3.

19. (new) A monocyclopentadienyl complex as claimed in claim **18**, wherein the cyclopentadienyl system Cp has the formula (II):



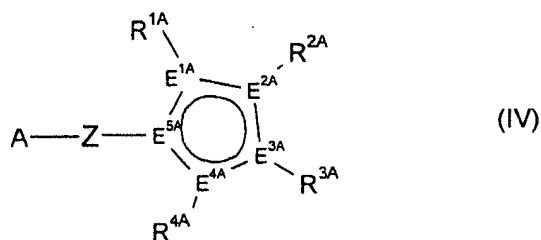
where the variables have the following meanings:

$E^{1A}-E^{5A}$ are each carbon or not more than one E^{1A} to E^{5A} is phosphorus,

$R^{1A}-R^{5A}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 , BR^{6A}_2 , where the organic radicals $R^{1A}-R^{5A}$ may also be substituted by halogens and two vicinal radicals $R^{1A}-R^{5A}$ may also be joined to form a five- or six-membered ring, and/or two vicinal radicals $R^{1A}-R^{5A}$ are joined to form a heterocycle which contains at least one atom from the group consisting of N, P, O and S, and where 1, 2 or 3 substituents $R^{1A}-R^{5A}$ is a group -Z-A and

R^{6A} are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl radical and 6-20 carbon atoms in the aryl radical and two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring.

20. (new) A monocyclopentadienyl complex as claimed in claim **18**, wherein the cyclopentadienyl system Cp together with -Z-A has the formula (IV):



where the variables have the following meanings:

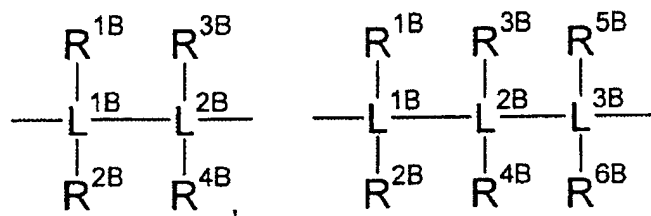
$E^{1A}-E^{5A}$ are each carbon or at most one E^{1A} to E^{5A} is phosphorus,

$R^{1A}-R^{4A}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 , where the organic radicals $R^{1A}-R^{4A}$ may also be substituted by halogens and two vicinal radicals $R^{1A}-R^{4A}$ may also be joined to form a five- or six-membered ring, and/or two vicinal radicals $R^{1A}-R^{4A}$ may be joined to form a heterocycle containing at least one atom from the group consisting of N, P, O and S,

R^{6A} are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring.

A is an unsubstituted, substituted or fused, heteroaromatic ring system,

Z is a bridge between A and Cp and is selected from the group consisting of



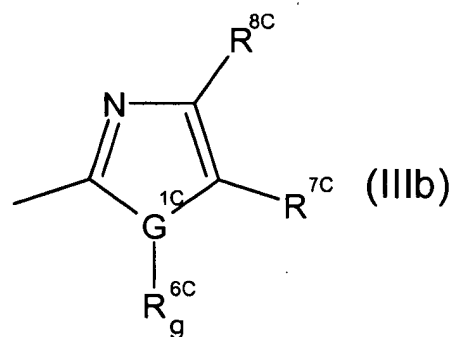
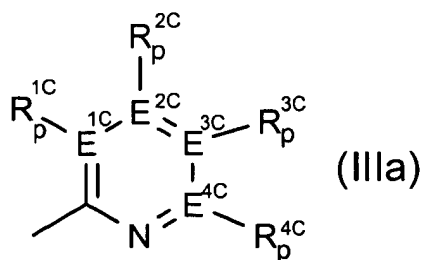
where

L^{1B} - L^{3B} are each, independently of one another, carbon or silicon,

R^{1B} - R^{6B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{7B}_3 , where the organic radicals R^{1B} - R^{6B} may also be substituted by halogens and two geminal or vicinal radicals R^{1B} - R^{6B} may also be joined to form a five- or six-membered ring and

R^{7B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{7B} may also be joined to form a five- or six-membered ring.

21. (new) A monocyclopentadienyl complex as claimed in claim **18**, wherein A has the formula (IIIa) or (IIIb):



where the variables have the following meanings:

$E^{1C}-E^{4C}$ are each carbon or nitrogen,

$R^{1C}-R^{4C}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{5C}_3 , where the organic radicals $R^{1C}-R^{4C}$ may also be substituted by halogens or nitrogen and further C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{5C}_3 groups and two vincinal radicals $R^{1C}-R^{4C}$ or R^{1C} and Z may also be joined to form a five- or six-membered ring and

R^{5C} are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{5C} may also be joined to form a five- or six-membered ring and

p is 0 when $E^{1C}-E^{4C}$ is nitrogen and 1 when $E^{1C}-E^{4C}$ is carbon,

G^{1C} is nitrogen, phosphorus, sulfur or oxygen,

$R^{6C}-R^{8C}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{9C}_3 , where the organic radicals $R^{6C}-R^{8C}$ may also be substituted by halogens or nitrogen and further C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and

6-20 carbon atoms in the aryl part or $\text{SiR}^{9\text{C}}_3$ groups and two vincinal radicals $\text{R}^{6\text{C}}\text{-R}^{8\text{C}}$ or $\text{R}^{6\text{C}}$ and Z may also be joined to form a 5- or 6-membered ring and

$\text{R}^{9\text{C}}$ are each, independently of one another, hydrogen, $\text{C}_1\text{-C}_{20}$ -alkyl, $\text{C}_2\text{-C}_{20}$ -alkenyl, $\text{C}_6\text{-C}_{20}$ -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals $\text{R}^{9\text{C}}$ may also be joined to form a five- or six-membered ring and

g is 0 when $\text{G}^{1\text{C}}$ is sulfur or oxygen and 1 when $\text{G}^{1\text{C}}$ is nitrogen or phosphorus.

22. (new) A monocyclopentadienyl complex as claimed in claim **18**, wherein Z is selected from the group consisting of $\text{-C(R}^{1\text{B}}\text{R}^{2\text{B}})\text{-Si(R}^{3\text{B}}\text{R}^{4\text{B}})\text{-}$, $\text{-CH}_2\text{-C(R}^{3\text{B}}\text{R}^{4\text{B}})\text{-}$ and 1,2-phenylene.